Attorney Docket: CHAMBERS #2

ANIMAL LEG WRAP

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TECHNICAL FIELD

This invention relates to a leg wrap for wrapping a leg of an animal. The leg wrap is particularly suitable for application to the leg of a horse and can be utilized, for example, to apply medicine, heat, or cold to the horse leg.

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BACKGROUND ART

It is well known to wrap horse legs with fabric material for therapeutic and other purposes. Typically, wraps are in the form of fabric strips which are wound about the horse's leg and secured thereto by separate fasteners such as pins, tape, straps, and strings.

These common prior art approaches can actually injure a horse. For example, pins can pop open and scratch or puncture a horse. Tape can break. When this happens, the bandage becomes loose and can be entangled about a horse's leg. Circulation of blood can be cut off, possibly resulting in laminitis.

Furthermore, a horse's leg can be abraded and the hair removed.

Injury can also result if a horse begins to thrash or struggle to disengage itself from an unravelled bandage.

String is dangerous because it can be pulled too tight by the person applying the bandage or wrap and blood circulation can be impaired or cut off. Strings, tapes, and straps generally are applied horizontally across the horse's tendon, cannon bone and splint bone, causing localized compressive forces encircling the leg.

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Prior art animal leg wraps are also often difficult to use and can result in considerable variation in wrap tension in different applications. Many prior art leg wraps also present an unsightly appearance.

The following United States Patents are believed representative of the state of the prior art in this field: U.S. Patent No. 5,152,285, issued October 6, 1992, U.S. Patent No. 5,107,827, issued April 28, 1992, U.S. Patent No. 4,685,278, issued August 11, 1987, U.S. Patent No. 4,538,602, issued September 3, 1985, U.S. Patent No. 4,424,809, issued January 10, 1984, U.S. Patent No. 3,882,867, issued May 13, 1975, U.S. Patent No. 3,822,705, issued July 9, 1974, U.S. Patent No. 3,667,462, issued June 6, 1972, and U.S. Patent No. 3,209,517, issued October 5, 1965.

DISCLOSURE OF INVENTION

The present invention relates to an animal leg wrap which can be uniformly and efficiently applied to the leg of a horse or other animal. Tension is applied uniformly along the leg. In addition, the construction of the animal wrap of the

present invention ensures that the wrap will be applied in a uniform manner whenever used to provide the desired degree of tension. In addition, the animal wrap of the present invention presents an attractive appearance after application.

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The animal leg wrap of the present invention includes an inner wrapping sheet of flexible material of generally rectangular configuration having an inner wrapping sheet top edge, an inner wrapping sheet bottom edge, and spaced first and second wrapping sheet side edges extending between the inner wrapping sheet top edge and the inner wrapping sheet bottom edge.

The leg wrap also includes an outer wrapping sheet of flexible material of generally rectangular configuration having an outer wrapping sheet top edge, an outer wrapping sheet bottom edge, and spaced first and second outer wrapping sheet side edges extending between the outer wrapping sheet top edge and the outer wrapping sheet bottom edge. The inner and outer wrapping sheets are in registry over substantial portions thereof with top and bottom edges thereof in substantial registry.

Soft, resilient filler material is disposed between the inner wrapping sheet and the outer wrapping sheet.

Stitching extends through the inner and outer wrapping sheets and the filler material securing the inner and outer wrapping sheets and the filling material together. The stitching comprises spaced, substantially parallel lines of stitching located between the top edges and the bottom edges of the inner and outer wrapping sheets and substantially perpendicular thereto

to define a plurality of substantially rectangular pillows separated by the lines of stitching, the substantially rectangular pillows being elongated and having primary axes. The primary axes are disposed perpendicular to the top edges and the bottom edges of the inner and outer wrapping sheets.

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Securement means is provided for securing the leg wrap about the leg of an animal with the plurality of pillows surrounding the leg and a primary axes of the plurality of pillows oriented with the primary axis of the leg and at least some of the plurality of pillows in overlapping condition.

Other features, advantages, and objects of the present invention will become apparent with reference to the following description and accompanying drawings.

BRIEF DESCRIPTION OF DRAWINGS

Fig. 1 is a perspective view illustrating an animal leg wrap constructed in accordance with the teachings of the present invention on each of the front legs of a horse;

Figs. 2-7 are perspective views illustrating sequential stages involved during application of the leg wrap on and about the leg of a horse;

Fig. 8 is a plan view of one side of the leg wrap prior to its application to the leg of a horse;

Fig. 9 is a cross-sectional view taken along the line 9-9 in Fig. 8; and

Fig. 10 is a plan view of the other side of the leg wrap prior to its application to the leg of a horse.

BEST MODE FOR CARRYING OUT THE INVENTION

Referring now to the drawings, a leg wrap constructed in accordance with the teachings of the present invention is identified by reference numeral 10. Fig. 1 shows a leg wrap 10 secured in place on each front leg of a horse.

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Leg wrap 10 includes an inner wrapping sheet 12 of flexible material such as woven nylon or polyester.

Inner wrapping sheet 12 is of substantially rectangular configuration and has an inner wrapping sheet top edge 14, an inner wrapping sheet bottom edge 16, and spaced first and second inner wrapping sheet side edges 18, 20 extending between the inner wrapping sheet top edge and the inner wrapping sheet bottom edge.

Leg wrap 10 also includes an outer wrapping sheet 26 of flexible material (which may be the same type of flexible material utilized for the inner wrapping sheet) also of substantially rectangular configuration. Outer wrapping sheet 26 includes an outer wrapping sheet top edge 28, an outer wrapping sheet bottom edge 30, and spaced first and second outer wrapping sheet side edges 32, 34 extending between the outer wrapping sheet top edge and the outer wrapping sheet bottom edge.

The top and bottom edges of the inner and outer wrapping sheets are in registry as are inner wrapping sheet side

edge 18 and outer wrapping sheet side edge 32. Side edges 18, 32 may be integrally formed at a bight or they may be sewn together.

The outer wrapping sheet 26 is longer than the inner wrapping sheet 12 and extends beyond inner wrapping sheet side edge 20 to form an outer wrap segment 36 comprising a single layer of flexible sheet material. In the arrangement illustrated, the outer wrapping sheet is of double ply construction over a portion 26A thereof (see Fig. 10). The outer ply (which may be secured to the rest of the outer wrapping sheet in any desired manner such as stitching) extends beyond side edge 20 and forms the outer wrap segment. The outer ply is narrower than the inner ply of the outer wrapping sheet.

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Soft, resilient filler material in the form of batting 38 is located between the inner wrapping sheet 12 and the outer wrapping sheet 26 with the batting 38 extending above and below the outer ply of outer wrapping sheet 26 to some extent.

Batting 38 may be formed of any suitable material such as raw cotton or wool or synthetic fibrous material.

Stitching extends through the inner and outer wrapping sheets and the filler material to secure the inner and outer wrapping sheets and the filler material together. The stitching includes spaced parallel lines of stitching 40 extending between the top edges and the bottom edges of the inner and outer wrapping sheets and perpendicular thereto. Preferably, stitching (not shown) is applied at the registered top and bottom edges of the wrapping sheets to secure them together.

Four rectangular pillows 44, 46, 48, and 50 are created and separated by the lines of stitching 40. The rectangular pillows are elongated and have primary axes disposed perpendicular to the top edges and the bottom edges of the inner and outer wrapping sheets.

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Securement means is provided for securing the leg wrap about the leg of a horse or other animal with the plurality of pillows surrounding the leg and the primary axes of the plurality of pillows oriented with the primary axis of the leg and at least some of the plurality of pillows in overlapping condition.

More particularly, the securement means comprises elongated, narrow securement strips 60. A particularly suitable securement strip material is touch fastener material such as that sold under the trademark Velcro. The securement strips extend top edge to bottom edge relative to the wrapping sheets. That is, each securement strip has a longitudinal axis extending in the same direction as the lines of stitching 40.

To perform its function properly, the leg wrap 10 is applied in a specific manner to the leg of a horse. Fig. 2 shows the leg wrap being brought into position relative to the horse leg with the inner wrapping sheet oriented toward the leg. In Fig. 3 the relatively narrow pillow 44 (3 inches has been found to be a suitable width) is located against the outer side of the horse's leg over the splint bone. It is to be noted that the lines of stitching and securement strips are oriented parallel to the leg.

Next, the leg wrap is wrapped as shown in Figs. 3 and 4 to overlap pillow 44 to maintain same in place. The pillow 46 completely covers the tendon, inside splint and cannon bone of the horses leg and holds the first pillow in place.

The third pillow, pillow 48, comes into partial registry with pillow 44 to compensate for the width of the pillow 44 to provide an even distribution of batting about the horse's leg.

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With reference to Fig. 5, it will be seen that wrapping of the leg wrap in the manner just described, places securement strip 60 at the outside of the horse's leg. Wrapping is continued until securement strip 62 engages securement strip 60. This orientation and registry of the securement strips 60, 62 ensures that the same tension is applied to the horse's leg every time the leg wrap is used. This is very important because greater or lesser tensioning of the wrap can have potentially harmful effects, such as inefficient treatment or the impeding of blood circulation in the leg.

Next, the single layer outer wrap segment 36 is wrapped about the rest of the leg wrap. The distal end of the outer wrap segment 36 is secured in place by engagement between securement strips 64 and 66. Again, this ensures uniform tensioning of the leg wrap every time the leg wrap is applied to a horse's leg. Figs 6 and 7 show, respectively, the outer wrap segment 36 being wrapped about the leg and the final configuration of the leg wrap 10 after the outer wrap segment 36 is secured in place.

The fact that outer wrap segment 36 is somewhat narrower provides greater comfort for the horse, the batting above and below outer wrap segment 36 remaining essentially uncompressed.

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If desired, monograms or other suitable indicia may be applied to the outside of the outer wrap segment 36. Proper positioning of such indicia will always take place due to the precise, uniform location of the securement strips whenever the leg wrap is used.

The light and durable leg wrap arrangement described above is a considerable advance over conventional prior art approaches which commonly utilized mechanical fasteners of various types which can fall off the wrap itself. With the present arrangement, one never has to worry about losing or misplacing mechanical fasteners. Furthermore, tension is evenly distributed, not localized.

The leg wrap of the present invention readily lends itself to storage. For example, one leg wrap end may be attached to another by the securement strips. Furthermore, one leg wrap may be attached the to another and the leg wraps rolled together to form a compact package for storage or shipment.